



## The 3<sup>rd</sup> Quarter of 2021 Management Discussion and Analysis



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*Next summer, on current trends, more than half the world will remain unvaccinated. We simply aren't getting doses out to the people who need them. Poor countries, which have injected just 2% of their adults, are being denied vaccines, while rich countries that have already fully immunized more than 60% of their citizens continue to monopolize access to doses. Thousands will die this month and for the foreseeable future, not because there are too few vaccines being produced but because they are being hoarded in the places that need them least. Our collective failure to turn the scientific success of the vaccines themselves into actual protection for all, and to avoid dividing the world into vaccine haves and have-nots, is a moral catastrophe. If the world were a state, we might well call it a failed one.*

**Gordon Brown**

*The Guardian, 9 September 2021*

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## Our Key Performance Indicators

### 3rd Quarter 2021 Financial Performance (US Dollar Terms)

**The results**, reviewed by EY Office Ltd., show you the latest financial position of the Company. The net profit for Q3 2021 was \$45.40 million, almost double the \$26.23m figure in Q2 2021. The earnings per day per ship for Q3 2021 came in at \$ 24,722, a significant jump from the \$17,841 figure in Q2 2021 and almost 3 times higher than the Q3 2020 figure of \$8,786. Our 9M 2021 profit has been the highest since 2008! Daily operating costs of \$5,136 were higher than our target of \$4,750 and higher than the \$4,617 figure recorded in Q3 2020. This was mainly on account of the disruption to crew changes caused by Covid-19. EBITDA came in at \$ 57.35 million, a big jump from the \$35.28m in Q2 2021 and a 5.16 times the \$11.12 million recorded in Q3 2020. The profit per share stood at Thai Baht 0.96 for this quarter.

THE HARD FACTS	Q3 2020	Q2 2021	Q3 2021
Highest earnings per day per ship in USD	15,013	45,000	50,336
Average earnings per day per ship in USD	8,786	17,841	24,722
Av. earnings per day per Handy size ship in USD	8,826	15,753	22,230
Av. earnings per day per Supramax ship in USD	8,435	18,366	24,459
Av. earnings per day per Ultramax ship in USD	9,085	22,211	30,934
Av. earnings per day per Supramax/Ultramax ship in USD	8,741	20,175	27,506
Operating cost per day per ship in USD	4,617	5,043	5,136
EBITDA in million USD	11.12	35.28	57.35
Net Profit (Loss) in million USD excluding exchange gain (loss) and non-recurring items	(1.10)	24.70	46.51
Net Profit (Loss) in million USD	(0.71)	26.23	45.40
Earnings (Loss) Per Share in Thai Baht excluding exchange gain (loss) and non-recurring items	(0.02)	0.50	0.99
Earnings (Loss) Per Share in Thai Baht	(0.01)	0.53	0.96

### Consolidated Financial Performance (Thai Baht Terms)

For the quarter ending 30 September 2021, the Company earned a net profit of Baht 1,501.26 million as compared to a net profit of Baht 826.31 million in Q2'2021 and a net loss of Baht 22.11 million in Q3'2020. The main reasons for the changes are as follows:

- The Net Vessel Operating Income (Vessel Operating Income net of voyage disbursements and bunker consumption) in Q3'2021 is 47% and 198 % higher than the Net Vessel Operating Income in Q2'2021 and Q3'2020, respectively. This is mainly due to an increase in the average earnings per Vessel per day which increased from USD 17,841 in Q2'2021 and USD 8,786 in Q3'2020 to USD 24,722 in Q3'2021, due to a strong Dry Bulk Freight market.
- Vessel running expenses (Opex) per day per Vessel (including depreciation/amortization of Drydocking/Special Survey expenses) in Q3'2021 are 9% and 21% higher than the figure in Q2'2021 and Q3'2020, respectively. The increases are mainly on account of higher store/spares expenses and higher crew expenses related to covid-19 restrictions.

- Administrative expenses (including management remuneration) for Q3'2021 came in Baht 5.77 million higher than the figure in Q2'2021, mainly due to the depreciation of Thai Baht against USD and Baht 93.11 million higher than the figure in Q3'2020, mainly due to an increase in variable compensation expenses.
- Finance cost for Q3'2021 was Baht 3.56 million higher than the figure in Q2'2021, due to the depreciation of Thai Baht against the USD and Baht 32.94 million lower than the figure in Q3'2020, due to lower interest expenses. This was driven by a lower LIBOR base rate as well as due to a reduction in overall debt.
- Exchange gain in Q3'2021 was Baht 27.78 million lower than the figure in Q2'2021 and Baht 11.85 million higher than the figure in Q3'2020. The changes were mainly on account of changes in the US Dollar equivalent figure of our Thai Baht debt.
- Losses on derivative for Q3'2021 of Baht 61.37 million mainly from one-time settlement of interest rate swap contracts due to loan prepayment.

For the nine-month period ending 30 September 2021, the Company earned a net profit of Baht 2,702.70 million as compared to a net loss of Baht 1,322.28 million during the same period last year. The main reasons for the changes to the nine-months financial results are as follows:

- The Net Vessel Operating Income (Vessel Operating Income net of voyage disbursements and bunker consumption) for the first nine-months of 2021 is 138% higher than the figure during the same period last year. This is mainly due to an increase in the average earnings per Vessel per day which increased from USD 7,765 in the first nine-months of 2020 to USD 18,286 in the first nine-months of this year, due to a strong Dry Bulk Freight market. The fleet size of 36 vessels as on 30 September 2021 remained the same as in the first nine-months of last year.
- Vessel running expenses during the first nine-months of 2021 are 13% higher than the figure during the same period last year. The average Vessel operating expenses (Opex) per day per Vessel (including depreciation/amortization of Drydocking/Special Survey expenses) increased from USD 4,584 in the first nine-months of 2020 to USD 5,038 during the first nine-months of this year, mainly on account of higher crew expenses related to covid-19 restrictions and store/spares expenses.
- Administrative expenses (including management remuneration) for the first nine-months of 2021 came in Baht 141.52 million higher than the same period last year, mainly due to an increase in personnel expenses.
- Finance costs during the first nine-months of 2021 were Baht 137.50 million lower than the same period last year, due to lower interest expenses. This was driven by a lower LIBOR base rate as well as due to a reduction in overall debt.
- Exchange gain for the first nine-months of 2021 was Baht 168.79 million higher than the same period last year, mainly because favorable currency movement led to a reduction in the US Dollar equivalent figure for Thai Baht denominated debt.
- Losses on derivative of Baht 69.66 million for the first nine-months of 2021 was mainly from a one-time settlement of interest rate swap contracts due to loan prepayment.

## Early redemptions of our two bonds, PSL206A & PSL211A

We are pleased to report that we have redeemed both our outstanding bonds – PSL206A was fully redeemed on 23rd April 2021, and PSL211A was fully redeemed on 27th September 2021.

## The Chayanee Naree incident

On 5 August 2021, Precious Visions Pte. Ltd. which is a subsidiary of the Company and an owner of M.V. Chayanee Naree (the "Vessel") signed a voyage charter contract to load 46,000 metric tons of bulk sugar from Santos, Brazil for discharge in Lagos, Nigeria. At the load port in Santos, Brazil, on 18 September 2021, drugs were found inside one of the cargo holds of the Vessel. The Brazilian authorities then conducted a thorough investigation after which they were satisfied that none of our crew members were involved in or assisted the smuggling of drugs. Without pressing any charges on any crew members and/or the owning company, the Brazilian authorities permitted the Vessel to sail out from Brazil on 19 September 2021. Upon arriving at the discharge berth in Lagos on 9 October 2021, the Nigerian authorities conducted an extensive search of the Vessel, however no suspicious objects were uncovered. The Vessel then commenced discharge of her cargo. On 13 October 2021, drugs were found in a hold of the Vessel. The case is still under investigation by the Nigerian authorities. Thus far, there have been no charges registered against any our crew members and/or the Company. On 29 October 2021, the National Drug Law Enforcement Agency (NDLEA) obtained an ex-parte order from a Nigerian court for an interim attachment of the Vessel and a remand of the 22 crew members for 14 days. On the same day, we received a claim of about USD 3.9 million from the cargo receivers. We are working with our lawyers to defend this claim.

We are committed to conducting business in a lawful manner and strongly condemn any illegal activities, including drug trafficking. We affirm that we are not and were not involved in any manner whatsoever with such illegal activities and continue to cooperate with the relevant authorities in their investigations. Further, never in the 32-year long history of Precious Shipping, has any of our vessels or crew been involved in a drug smuggling incident. We have over the years also made innumerable calls to ports in Nigeria, without incident. However, following this incident, we have taken multiple actions in order to strengthen our Standard Operating Procedures in order to prevent such incidents in the future.

## Long Term versus short term Charters

The long-term charters already booked, over 1 year in duration are shown in the chart below. As can be seen, our current and 4 years forward rolling book is presently at the 15.3% level with a gross visible revenue stream of \$164.03 million.

Year	2021	2022	2023	2024	2025
Total Available Days	13,140	13,140	13,140	13,176	13,140
Fixed T/C Days*	2,261	2,286	1,825	1,830	1,825
% age Fixed T/C Days	17%	17%	14%	14%	14%
Av. T/C Rate/Day in USD**	16,459	18,762	15,316	15,316	15,316
Contract value in million USD	37.21	42.89	27.95	28.03	27.95

\*This comprises charters on 5 ships on fixed rate charter and 2 ships on variable rate charters

\*\*Average T/C Rate/Day for the variable rate charters is estimated based on rates prevailing in October 2021 and actual earnings

It is our intention to continue to charter out our ships on long term period contracts whenever practical and economically viable.

## Market Segmentation

During Q3, the Baltic Handy Size Index (BHSI) averaged 1,788 points derived from the average Time Charter (TC) rate of USD 32,194. Compared to that, our Handies earned USD 22,230 and underperformed the BHSI TC rate by 30.9%. During Q3, the Baltic Supramax Index (BSI) averaged 3,115 points derived from the average TC rate of USD 34,269. Compared to that, our Supras/Ultraras earned USD 27,506 and underperformed the BSI TC rate by 19.7%. Our target has been to outperform both the indices.

Type of vessel	Q3 average Index charter rate in \$ (A)	PSL average time charter Rate in \$ in \$ (B)	PSL ship difference from Index ships in % (C)	Difference if vessel fixed on 1st day vs Q3 Avg (D)	PSL long term time charter ships adjustment in % (E)	{A*(C+D+E)} = (F) in \$	PSL true time charter rate in \$ (B+F)	PSL true performance versus Index ship in %
Handy	32,194	22,230	25%	13.4%	12.41%	16,347	38,577	<b>+19.8%</b>
Supra	34,269	27,506	10%	5.7%	3.58%	6,598	34,104	<b>-0.5%</b>

The **three reasons** for our underperformance are: **Firstly**, our ships are 'different' from the index ships. On an apples-to-apples comparison, our Handy ships are **ranked 25% below** and the **Supras are 10% below** the index ship TC rates. **Secondly**, the 5 handy ships, out of our fleet of 19, on long term charter are fixed at **\$17,013** per day and the one Supra, out of our fleet of 17, is at **\$13,421** per day, both are well below the average TC rate for the index ships in Q3 (BHSI \$32,194 and BSI \$34,269). And **finally**, if we see the way the market has gone up, during Q3, if you had **fixed all your ships on day 1 of Q3 at the index level** (BHSI \$27,890 and BSI \$32,324), despite our ships not being as well ranked as the index ships, you would still **underperform the average index ship TC by 13.4% in Handy and 5.7% in Supras**. If we had applied these three adjustment factors to our result, we would have **outperformed the handy index by 19.8%, and just underperformed the supra index by 0.50%**, as shown in the above table.

**The next SET Opportunity Day** will be held virtually at 15.15 hours on the 17th of November 2021 where we will be presenting and discussing our Q3 results. The SET will webcast the Opportunity Day presentation live, and you can attend the [webinar via this link](#). Number of online participants attending PSL's live presentation of Q2 results on 18th of August were 232 on the SET website/YouTube views and 78 on Facebook for a grand total of 310.

**Ship recycling has slowed significantly with 4.94 MDWT** of ships being recycled up to and including Q3 across all sectors of the dry bulk market as compared to **11.16 MDWT** in the same period of 2020. The existing **age profile at the end of Q3 2021 of 66.68 MDWT** (35.82 MDWT in the geared segment and 30.86 MDWT in the gearless segment) or **7.15%** (10.91% in the geared segment and 5.1% in the gearless segment) **of the world fleet being 20 years or older at the end of Q3 2021**, together with **low levels of the order book to fleet ratio of 6.31%**, order book up to end 2024 compared to net supply end of Q3 2021, (4.89% in the geared segment and 7.08% in the gearless segment), should result in the world dry bulk fleet growing at a much slower pace. **Healthier recycling is expected during 2023** due to the number of 20+ year old ships in the world fleet, and regulatory pressures from EEXI and CII on these ships.

## Evergrande and its implications

The Latin American debt crisis that exploded in 1982, involved a total of 19 countries, and was valued at USD 327 billion. By the time this crisis was brought under control in 1989, the total debt had ballooned to USD 414 billion. The Evergrande situation, with upward of USD 300 billion in liabilities outstanding from just one corporate entity, when placed in context with the crisis of the 19 Latin American countries in the 1980ies shows that either the value of money has collapsed since 1980 or debt has become extremely easy to raise for a corporate. Nothing else explains the Evergrande debt situation. The Chinese regulators have got Evergrande to sell 20% of shares in Shengjing Bank for \$1.5 billion to try to stem the financial fallout. Evergrande is continuously evolving, and to make any calls of how it would be finally resolved would be premature and speculative. But if Evergrande collapses and is not restructured, what will happen? The holders of their equity/debt will be wiped out. The identity of the holders of such equity/debt will determine the quantum of help that is given to them by the Chinese government. Contagion risk to other similarly indebted builders will increase significantly and might lead to systemic risks for the entire financial system. In a restructure or collapse Evergrande assets will be sold at below market values, with buyers taking over their holdings at a discount to complete partly built floor space and sell it, at a lower price, and achieve reasonable profit margins. This would be a win-win situation where projects are completed, homebuyers get their assets at less than their original cost, with debt/equity holders facing the pain.

Put yourself in the shoes of the Chinese government for a second, and then ask yourself, would you let something go badly wrong with the economy because of Evergrande? Have they done that in the past 30+ years? We have always read that China was going to collapse, for one reason or the other, in the western led mainstream media reports, but as Mark Twain had famously quipped, the rumors of China's economic collapse have been greatly exaggerated! Having said that, Modern Land, Fantasia Holdings, Sinic Holdings, and China Properties Group are four more property developers that have defaulted on their financial commitments. The Chinese authorities have asked the billionaire owner of Evergrande to use his enormous personal wealth to bail out his failing entity.

We will see how the Evergrande situation unravels. It is only a question of a few weeks, and the answers would be clear by then. What is clear is that Evergrande is more of a financial market event than one that impacts physical markets. Evergrande bonds comprise 16% of the USD denominated High Yield Bond market issued by Chinese companies, however, the Company has only a 4% share of the Chinese property market. An estimated 20 million rural Chinese citizens will continue to move to cities each year as part of the Government's urbanization efforts and so housing demand is going to continue to remain strong. For this reason, we remain positive about the long-term prospects of the real estate market in China as well as the demand for raw materials.

## Three Dilemmas Facing China

There are three dilemmas in front of the Chinese regulators – moral hazard; systemic risk; pre-determined high GDP growth rates being met. The first thing that has already gone is predetermined high growth rates. These have been lowered to more realistic levels. The new way of stating them is 'about so and so' GDP growth rates, so no 'hard targets' that must be met. Then comes moral hazard that needs to be addressed. A lot of that has already been done due to the drastic crackdown on corruption and collusion. However more remains to be done and this is where it gets tricky. If China stomps down too hard on moral hazard, they will have long term success but with short term turmoil and pain. If China does not stomp down hard enough on moral hazard, you will neither have long term success nor short term relief as one crisis or another will continue to blowup like Evergrande.

The Chinese government must, therefore, get this ‘stomping down on moral hazard’ done just right, a la Goldilocks. Lastly, systemic risk, is something that is much more manageable due to the various fiscal and monetary tools available in the government’s toolbox. So far, the track record of China at getting things just right has been more impressive than anything that we have seen in the ‘free’/capitalistic world.

## Power outages in China

China’s ambitious climate policies have forced local authorities to ration power, a main contributor of the recent widespread power cuts. Chinese coal fired power plants are running at less than 50% of their installed capacity as every unit of power produced at coal prices of 1,000/1,500 Yuan per ton, results in increased losses, as sales prices are fixed. Climate change, with extreme heat and cold in China, creates additional energy demand. Lack of rainfall in China has affected hydropower; windless days have impacted wind energy, and both have contributed to a shortfall in renewable energy sources. Geopolitical spats, banning coal from Australia, resulted in disruption and increased ton-mile demand. With power outages in the northeast, if China does not increase coal production and imports, existing power shortages will be further exacerbated. The Chinese population affected will be really upset as winter progresses and the cold starts to bite. And the one thing that the Chinese government does not want, above all else, is a minor revolution. So, smart politics suggests that China’s regulators will produce more coal and allow greater imports. It is in the Chinese government’s economic interest to import coal. Since both politics and economics make a strong case for the Chinese to rush to import coal, this is likely to happen. Coal, oil, and gas prices world over have increased sharply because the world is operating at a higher level of economic activity, the spike in demand for energy raw materials, was not foreseeable even 6 months ago. The shortage in supply of ‘polluting’ raw materials is a direct result of owners of such assets having stopped investing in additional supply capacity because it is perceived as a dirty industry, and their banks and shareholders, are not willing to fund such growth. High prices are, therefore, here to stay for such ‘polluting’ raw materials. Shortage and high price of gas has increased the demand for coal in many countries, so analysts claim, demand for coal shipments will grow this, and next, year. How long will all this last will depend on many factors including the availability and price of competing clean energy resources and gas prices.

## Politics and Green statements

Governments make ‘green’ statements that do not become reality. Why? The answer is clear – economics trumps green resolutions every time as in the case of the EU/Germany switching to coal for electricity production. Similarly, China has made many statements about reducing steel production (without specifying the quantum of reduction) that have made the price of iron ore collapse, yet the price of coking coal, the other main ingredient in making steel, has gone up. So far, steel production in China has only come down in Q3. The figures by the end of 2021 will indicate if the resolution to reduce steel production in China is for real or was it done to simply lower the cost of raw materials that had gone up too sharply. China is also concerned about unemployment and will do all in its power to ensure full employment. That would include adding monetary and fiscal stimulus to the economy in a bid to avoid massive unemployment and riots in the streets. The good news is that all the above indicates that economic activity is increasing, and not decreasing, with increased ton-mile demand, so is positive for dry bulk shipping.

## Shipyards and Profitability

Shipyards want to build ships that make them the fattest profit margin, as you should expect from any business. The most profitable ships to build are always the largest ships and the lowest margin is from the smallest ships. Shipyard preference is to build Gas/Container ships, then Tankers, then Dry bulk ships, as dry bulk gives them the lowest profit margin everything else being equal. The ships of the future, most likely fueled by Ammonia, will give shipyards an even higher margin than when constructing Internal Combustion (IC) fuel burning engine ships. But the order of preference will remain unchanged. Maersk is building ships burning Methanol, a stop gap arrangement, before going in for Ammonia fueled ships. Methanol is a Carbon-based molecule hence it will have a lower CO2 footprint, although only 9% lower than Fuel Oil. Ammonia on the other hand has zero carbon molecules so is the cleanest fuel and would qualify as a Zero Emission Vessel or a ZEV. That is where the industry is headed. The race to develop ZEVs is already on and the first Ammonia engine ships should be on the water in 2024/2025 as they are already under development/construction. The first such ships are Tankers, next will be Gas carriers and Container ships, and lying-in last place will be their poor cousins, the dry bulk ships. And to be the last to enter this race is no bad thing and makes a lot of economic sense. We will not be penalized in case something goes wrong with the design, or regulations governing such ships, or accidents (Ammonia is highly toxic to humans), or clients not wanting to pay for the extra cost to build such ships by offering the same price as IC engine ships. Once the trial ships have started to perform, technically and economically, and designs have become common enough, shipyards will be able to offer prices that would make such 'future' ships commercially viable. That is the time when PSL would look at making investments in such technology/ships. This would likely be in 2030, about 5 years after we get the first trial Ammonia engine ships. Till then we will follow all developments, we are founder signatories to the 'Getting to Zero Coalition' but wait till commercially viable prices with early delivery dates are available from shipyards.

## Climate Change and its Implications for the Freight Market

This year's rainy season in Brazil 2020-2021 (Q4-Q1) had some 200+ ships stuck in congestion waiting for grain to be harvested and brought to port for loading. If the rainy season in Brazil next year 2021-2022 (Q4-Q1) is like what was experienced in 2020-2021, we should expect nothing different. The recent typhoons to hit China have increased congestion in their ports. Soon the Australian cyclone season will commence causing disruptions, port closures, delays, congestion, weather related port damages, rail line damages, mines getting flooded, rail lines getting flooded, all bullish for shipping. With climate change exhibiting no signs of getting better, we will have to learn to live with weather-related disruptions as part of the 'new normal'. In general, any disruption is always good for dry bulk shipping as they create inefficiencies and reduce the effective supply of ships.



## DWT of Dry Bulk ships ordered in 9M'21 versus 9M'19 and 9M'20

Year	Avg. BDI	Change		MDWT	Change		Change		Gearless MDWT	Change		
		2021 vs. 2020	2021 vs. 2019		2021 vs. 2020	2021 vs. 2019	2021 vs. 2020	2021 vs. 2019		2021 vs. 2020	2021 vs. 2019	
2019	1285	-	-	20.96	-	-	4.92	-	-	16.04	-	-
2020	971	-	-	13.07	-	-	7.04	-	-	6.03	-	-
2021	2,764	+185%	+115%	27.11	+107%	+29%	5.22	-26%	+6%	21.89	+263%	+36%

Source: Clarkson's, 18 Oct 2021

## Four Reasons Why New Build Ship Orders Has Been Restrained in the first three quarters of 2021

- Dry Bulk owners have suffered a **12-year drought in rates and have no money to invest** in new build ships.
- **Container, Tanker, and Gas ships have booked all available slots** at shipyards and hence **dry bulk has been 'crowded out'** and can only **get ships in 2024/2025** at the earliest.
- **89 shipyards** in China, Japan, S. Korea, **delivered 433 dry bulkers in 2020** with a **forward orderbook** of just **572 bulkers from SH 2021 till 2025** compared to **261 shipyards** in China, Japan, S. Korea, **delivered 1,569 dry bulkers in 2011!**
- **Current legislation, and expected regulations, will expedite the 'death' of Internal Combustion fuel oil burning ships before they reach the end of their economical lives.**

## Ship-Supply Issues

In the past, excessive supply is what has hurt the dry bulk industry. Owners are their own worst enemies, always shooting themselves in the foot by ordering too many ships when there is a bull run in freight rates. This time around it is different for dry bulk. This is the first time in living memory when rates have skyrocketed yet new ship orders have not reacted in the crazy way of past shipping booms. The DWT of ships ordered in the geared sector, in the 9 months of 2021 has been -26% and +6% than ships ordered in the same period of 2020 and 2019, respectively. In contrast, ships on order at the start of 2009, at the end of the last big boom in dry bulk shipping rates, was at an all-time high at 78.14% of the entire existing dry bulk fleet. Yet the current forward order book at the end of Q3 2021 is just 6.31% of the existing fleet, a 25-year low. Besides, ships that are over 20 years of age at end of Q3 are at 7.15% of the world fleet. So, net growth in ship supply is going to be tight for the next few years. Against that we have demand being fueled by the \$20t plus fiscal and monetary stimuli that the world has thrown at the Covid-19 problem; unboxing of containerized cargoes for shipment in smaller bulkers; the Toyota mantra of 'Just in time' has been replaced by 'Just in case'; corporates are holding more inventory; governments are building buffer stocks covering energy, food, other critical raw materials, while pushing through long-delayed infrastructure projects and refurbishments. The clash of constrained ship supply meeting increased ship demand makes up the ingredients of the perfect storm that could keep the dry bulk market at current or higher highs for the next few years so long as the current ship supply and ship demand pattern hold true. As if on cue, the BDI reached 5,650 points, a 13 year high, on 7<sup>th</sup> October 2021!

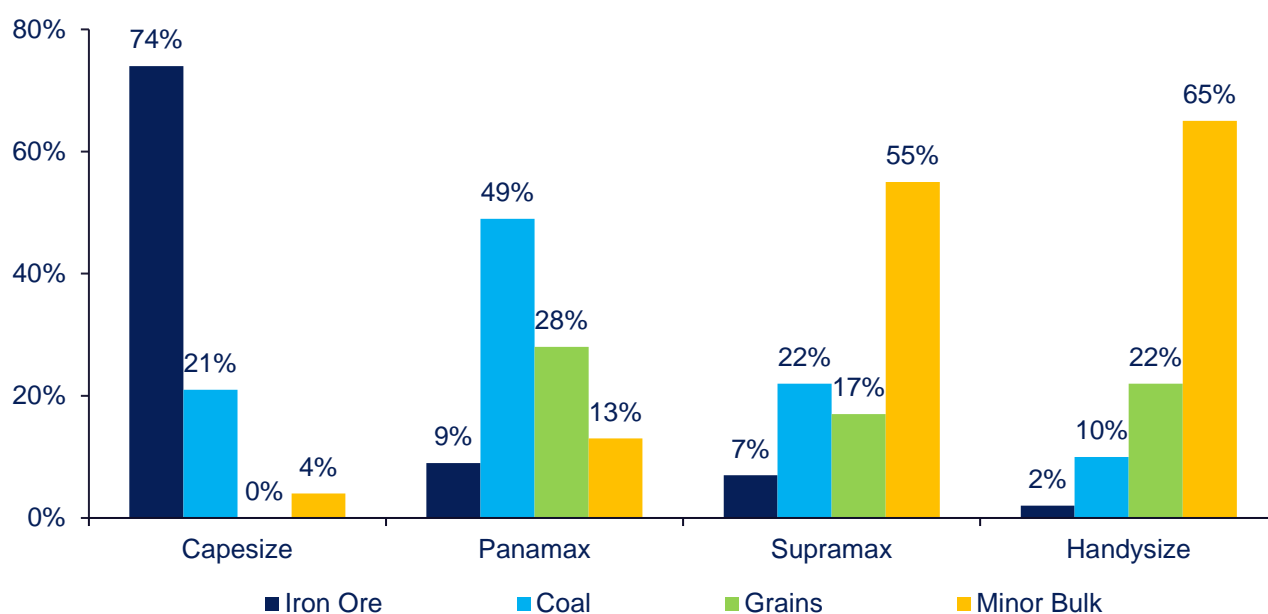
## How do you gauge future rates?

We do not go purely by index levels to gauge the future. What we look at are rates that our clients are willing to pay us today and then compare that with the current index levels to see if we should be worried, or aggressive, for the immediate future rates. That tells us what our clients are thinking. If the rates we are currently offered are at or below index levels, then we know that there is a chance that the immediate future rates will be softer than current rates. If they are willing to pay us, especially for short term period charters of between 3- and 5-months duration, at levels that are equal to or higher than the current spot index levels, then we know that rates are likely to continue their inexorable upward march in the next few months.

## Commodities Share by Different Dry Bulk Sectors

Commodities	Capesize	Panamax	Supramax	Handysize
Iron Ore	74%	9%	7%	2%
Coal	21%	49%	22%	10%
Grains	0%	28%	17%	22%
Minor Bulk	4%	13%	55%	65%

Source: Maersk Broker 5 Oct' 21



## Types of Cargoes Carried by Different Sectors in Dry Bulk

The above slide shows you the types of cargoes each sector of the dry bulk market has been carrying.

As Capes have a huge concentration risk in the amount of iron ore cargoes that they carry, it is but natural that they will face huge spikes in rates, both up and down, if there is any material change in the volume of iron ore being shipped. Capes hit a 13 year high of \$86,953 per day on 6<sup>th</sup> October, only to fall to \$37,669 by 28<sup>th</sup> October. This huge increase and subsequent fall in cape rates can be traced to increased iron ore shipments in September followed by a slowdown in October. Coal trades have not been able to support the capes as there is a shortage in coal supply, though demand for coal remains very high. Then there are the usual concerns over wet weather in Brazil in Q4 slowing down shipments of iron ore and in Q1 you get the Cyclone season in Australia followed by the Chinese New Year slowdown. Congestion will however temper these falls, and should demand start to spike, it will not take much to move the needle in this sector to heights previously seen in the last super cycle.

The reason for big ships inability to load minor bulk cargoes or grain is that these minor bulk/grain cargoes get damaged when loaded in Capes/larger gearless ships, or the ports of the shippers and receivers are unable to accommodate such large/deep draught ships, or do not have shore side equipment to load/discharge such cargoes, or sellers/buyers do not need such large quantities in one lot but need it spread over a longer period of time, or their banking facilities are not large enough to take such large lots of cargoes at one go, and so on and on. That is why every sector in dry bulk sticks to its knitting. However, at the boundaries between each dry bulk sector, poaching of cargoes does take place but it is not significant.

### Difference Between the 2003/2009 Super Cycle and Today

Daily average Time Charter rate	2003 – 2009	2010 – 2020	2021 (31 <sup>st</sup> October)
Capes	67,101*	14,924***	33,762**
Panamax	32,793*	10,965***	27,166**
Supras	28,013^^	10,765***	26,817**
Handy Size	18,753^^	8,789***	25,121**
Demand Billion Ton-miles per year	+5.4%	+4.2%	+4.6% (+5.2% DNB)^
Chinese Stimulus	China enters WTO 2001	USD 578 bn (2009)	\$667 bn (mid year 2020) (ROW \$20 tn+ )
Orderbook/Fleet ratio per year	+36.02%	+26.23%	+7.03%
Annual average % of 20-year-old (start of each year)	+18.38%	+11.27%	+6.25%
Annual average net supply growth	+6.8%	+6.4%	+3.4% (+1.5% DNB)^

Note: \*BCI 172K (4TC), BPI 74K (4TC), BSI 52K (6TC), BHSI 28K (6TC).

\*\*BCI 180K (5TC), BPI 82K (5TC), BSI 58K (10TC), BHSI 38K (7TC)

\*\*\*Combine of above two classifications

^^1 Yr. TC 32K, 1 Yr. TC 52K used for years where there was no BHSI (2003-2006) or no BSI (2003-2005).

^Estimates from Clarksons and DNB Markets.

Source: Clarksons

- **Old Age Profile: 20+ years of age end of 9M 2021 = 7.15% of existing fleet.**
- **Order book to fleet ratio end of 9M 2021 = 6.31% of existing fleet.**
- **Total 11.16 MDWT ships recycled in 9M '20 and 4.94 MDWT recycled in 9M '21 for a decrease of -56%.**
- **2.31 MDWT Geared ships recycled in 9M '20 and 1.39 MDWT recycled in 9M '21 for decrease of -40%.**

## 2003-2009 Super Cycle

- China entered the **WTO in 2001** and soon became the **manufacturing hub of the world. Commodity prices rose by 320%!**
- China's **GDP growth rates were off the charts** during this period!
- China's **import growth rate was explosive** for raw materials and **large quantities of finished goods** were exported.
- Corporates were focused solely on **'just in time' shipments** slashing inventory costs.
- **261 shipyards** in China, Japan, S. Korea, **delivered 1,569 dry bulkers in 2011!**
- The forward order book as a % of the existing fleet at the start of 2003 and 2009 **rose from 10.88% to a peak record of 78.14%!**

## Today

- Middle of a **pandemic, expected to be around for a couple of years. Commodity prices have risen, so far, by 98%!**
- **Pandemic related** protocols, port closures, longer voyages, waiting times, crew change delays, **will reduce effective supply of ships.**
- **EEXI and CII** regulations come into force on **01 Jan 2023** and will further **reduce effective supply of ships** due to forced slower steaming.
- Despite strong rates **every analyst is searching for a reason for a correction.**
- **89 shipyards** in China, Japan, S. Korea, **delivered 433 dry bulkers in 2020** with a **forward orderbook** of just **572 bulkers from SH 2021 till 2025.**
- The forward order book as a % of the existing fleet at the start of 2010 and 2020 **has fallen from 65.6% to just 10.6%.** Start of 2021 it was 7.0% and by **end of Q3 of 2021 was down to 6.31%!**
- China's **GDP growth rates have slowed to about 6%** and will continue to slow.
- China's **imports have lost their explosive growth rates**, plateaued, and may decline in future.
- **Caution today contrasts** with the **'sun will never stop shining'** attitude **during the super cycle.** This will **help elongate the current upcycle.**
- **Till Q3, 2021 had the strongest rates** compared to the average rates of the last 10 years!
- Corporates are laser **focused on 'just in case'.**
- **Governments** are trying to make their supply chains, raw materials, and food inventories, **pandemic resilient**

- **Governments are increasing infrastructure development** and refurbishment.

## BDI Developments and our read of the market

- Please read the article titled: [\*This crazy shipping crisis, explained\*](#) by Andy Serwer with Max Zahn, Yahoo Finance, by clicking on the embedded link. This will be a great way to start reading the rest of this section.
- Points from the Dry Bulk Panel Discussion – Surfing a bigger wave for longer? Arctic Securities, Oslo, 22 September 2021.
  - In past cycles, asset value and stock prices go up before cash flows, this time it is stock prices and cash flows that have gone up and asset values are still catching up.
  - Smaller ships, proxy for state of world GDP, have led the charge in this cycle indicating synchronized economic growth in the world, and not just in China.
  - Growth in coal shipments, considering the current desire for ‘green/clean’ energy around the world has been surprising. The geopolitical spat between China and Australia has increased the ton-mile with coal being shipped to China from US as an alternate to Aussie coal.
  - Congestion has certainly helped drive up rates but the peak in Cape rates (end September) has been reached at a time when peak congestion levels have dropped.
  - Speed of ships has increased during 2021, hence inefficiency of the world fleet (congestion versus increased speed) is lower this year than last year, indicating solid fundamental balance with demand being greater than supply, holding up rates.
  - Pacific markets were so much stronger than the Atlantic market in Q2 2021 that back haul rates were 5 to 7 times higher than the highest back haul rates in 2020.
  - As 2021 progresses, the freight market is moving from a demand led recovery to restrained supply pushing rates higher in Q4 and into 2022 and beyond.
  - New regulations will reduce the effective available supply of ships and help keep rates at these elevated levels for longer from 2023 onwards.
  - Black swans like Evergrande will impact the demand side and increase volatility BUT it is the limited growth in the supply side that will keep rates at elevated levels.
  - According to Clarksons demand, a GDP plus market, has grown consistently over the last 30 years barring a few years, so down cycles are caused by unrestrained ordering of ships which is not visible in this upcycle.
  - China is 50% of world steel production and is expected to show a 3% growth rate in 2021, yet World Steel Association is forecasting a total growth of steel production of 10%+ in 2021 meaning that the ROW is growing very strongly.
  - Infrastructure growth is here to stay for a long while. Europe and the USA have not added or refurbished their infrastructure for the last 60+ years. The shift to green energy like wind power is very intensive in cement and steel as are other green energy technologies.
  - Over ordering of dry bulk ships is largely absent due to limited shipyard capacity; crowding out of early berths by containers, tankers, and gas carriers; large increase in new building prices; and new regulations that will make IC engine ships obsolete before the end of their economical lives.
  - The forward curve is in steep backwardation today and mispriced. Long term charters today would require large discounts to the spot market. Once the forward market

normalizes to flat to contango mode is when longer term charters will become attractive. Till then look at short term charters to cover expected weaker Q1.

- As always, the dry bulk market will have the same macro issues of supply/demand balance dominating the narrative. **As supply and demand balance are in balance, the secular recovery will be characterized by extreme volatility** as any small change in demand or supply would have a disproportionate impact on the BDI and profitability.
- As if to emphasize the above, **Capes** have gone from a **low of USD 10,304 per day on 12<sup>th</sup> Feb 21 to a high of USD 86,953 per day on 7<sup>th</sup> Oct 21** and are currently trading at **USD 28,014 per day on 8<sup>th</sup> Nov 2021**.
- The current **orderbook** (to end 2024) **to fleet** (end Q3 2021) **ratio is at 6.31%** (for the **geared sector 4.9%** and for the **gearless sector 7.1%**) the **lowest reading since records were kept in 1996!**
- Data shows that **secondhand transactions**, despite the restrictions from Covid-19, **have increased dramatically**. This shows **faith in the market is very strong** and that **new building prices are too high and regulatory fear** has acted as a strong disincentive to investing in new ships.
- **Covid-19 continues to pose a threat** to individual countries as well as to the world economy. If this threat is managed with vaccines and cures, then **shipping companies would be in good shape for the next couple of years**.
- **Capital markets are slowly thawing**. We expect a reopening of debt/equity capital markets sometime during 2022.
- **Recycling has shrunk from 11.16 MDWT up to Q3'20 to 4.94 MDWT in 2021 due to the amazing freight market highs experienced this year**. We do not expect any significant increase in the DWT of recycled ships during 2022. However, 2023 will see a sharper increase in recycling due to regulatory pressures from EEXI and CII on older ships.
- **In the SH of 2021 ships are doing 2 knots faster speed than in 2020 due to the extremely good freight market**. This has increased effective supply by about 11%. According to Clarksons Covid-19 related congestion in the larger gearless ships, where it is extreme, is 4.4% above the 7-day moving average of 2016-2019, resulting in a **net increase of effective supply of about 7%**.
- **Ships 20 years or older**, comprising **66.68 MDWT or 7.15%** of the existing fleet (35.82 MDWT of geared ships or 10.91% and 30.86 MDWT of the gearless fleet or 5.11%) at the start of Q4 of 2021 **would be ideal candidates for recycling** as they would have to invest in ballast water treatments systems, expensive special surveys, and regulatory pressures from EEXI and CII starting in 2023.
- **In 2023, you are going to have a supply side dividend through slow steaming of the older ships or a combination of recycling some of the older ships and slow steaming by the balance**.
- Another way to look at **prospects** of the market would be to **compare the current forward orderbook of 58.83 MDWT (till end of 2024) at end of Q3 as a percentage (6.31%) of the existing fleet at the end of Q3** and see it is the lowest since records were first kept in 1996!
- Our read of the **growth in supply**, based on Clarksons data, **has a net fleet growth rate of 3.19% (907 MDWT to 936 MDWT) by end of 2021 and 1.65% (936 MDWT to 951 MDWT)**

**by end of 2022, assuming recycling of 8 MDWT/year and slippage of 20% per year in 2021 and 2022.**

- **PSL's exposure to the smaller geared segments** means that it will be exposed to **lower growth in net supply of 3.01% for 2021 and 1.75% for 2022.**
- The **BDI averaged 1,739 in Q1, 2,793 in Q2 and 3,732 in Q3** having started the year at 1,374 points. The BDI is at 2,718 points on 8<sup>th</sup> of November 2021 having hit a peak of 5,650 on 7<sup>th</sup> October 2021.
- According to Clarksons, **dry bulk ton-mile increased by 4.6%** till end of Q3 2021.
- **China's coal imports in September increased by 17% over August from 28.1 to 32.9 MMT and was up 76% or 14.2 MMT over September 2020.**
- China imported **843 MMT of iron ore down 2.96%** in 1<sup>st</sup> 3Qs of 2021 versus 2020.
- China imported **231 MMT of coal down 3.77%** in 1<sup>st</sup> 3Qs of 2021 versus 2020.
- China imported **74 MMT of Soybean down 0.7%** in 1<sup>st</sup> 3Qs of 2021 versus 2020.
- China produced **804 MMT of Steel up 2.63%** in 1<sup>st</sup> 3Qs of 2021 versus 2020.
- China exported **53 MMT of Steel up 31.34%** in 1<sup>st</sup> 3Qs of 2021 versus 2020.
- China imported **11 MMT of Steel down 29%** in 1<sup>st</sup> 3Qs of 2021 versus 2020.
- **China's PMI index was 50.4 in Jul, 50.1 in Aug, and 49.6 in Sep.** The Chinese government is taking various measures to support the economy.
- **China's GDP for Q1 was 18.3%, Q2 was 7.9% and Q3 was 4.9%.** The Chinese government have certainly stimulated economic activity and increased demand for dry bulk commodities. **The IMF expects +8% GDP growth for China for 2021.**
- In October, **IMF revised world GDP forecast for 2021 down to 5.9%.** The October IMF forecast for 2021 GDP growth rates was Australia +3.5%, Canada +5.7%, China +8%, Denmark +3.8%, France +6.3%, Germany +3.1%, Greece +6.5%, India +9.5%, Indonesia +3.2%, Italy +5.8%, Japan +2.4%, Netherlands +3.8%, New Zealand +5.1%, Norway +3%, Saudi Arabia +2.8%, South Korea +4.3%, Spain +5.7%, Sweden +4%, Switzerland +3.7%, Taiwan +5.9%, Thailand +1%, United Arab Emirates +2.2%, United Kingdom +6.8% and United States +6%.
- **India's rice exports may reach 45% of the share of the world market, 22 MMT, in 2021.**
- **The unboxed trade of container business moving back to bulkers is helping the smaller geared segment with additional cargoes.**
- **If our reading of supply at 3.19% pans out, then 2021 would be a great year considering the growth rate of 5.9% in world GDP indicated by the IMF.**
- **If the supply side gets a dividend by the recycling of the very old ships,** slow steaming by the rest of the owners who are using LSFO and forced down time in dry docks for those

owners passing special surveys on 20+ year older ships, then **the market would further benefit from this tightening of available ships on the supply side.**

## Key Supply Side Developments

**We started 2021 with 907 MDWT and have increased to 933 MDWT at the end of Q3 2021.** A further 0.84% (7.84 MDWT) is scheduled for delivery in the rest of 2021. If we were to apply a slippage factor of 20% (it was actually 5% to end Q3 2021) to these scheduled deliveries and further assume that scrapping reaches 8 MDWT (it was actually 4.94 MDWT to end Q3 2021) we would be left with **a fleet growth of 3.19%** (907 MDWT to 936 MDWT, of which 322 MDWT to 330 MDWT geared sector, 585 MDWT to 606 MDWT gearless sector) **by end of 2021 and 1.65% by end of 2022** (936 MDWT to 951 MDWT of which, 330 MDWT to 335 MDWT geared sector, 606 MDWT to 616 MDWT gearless sector), **assuming similar recycling and slippage levels as in 2021.** **Congestion/disruptions due to Covid-19 related protocols, ballasting ships,** are other factors that will assist supply side tightening.

## Ship's Speed

Time charter rates in SH 2021 are so high that all ships are sailing at full speed. A one knot increase in speed would increase the effective DWT supply of ships by about 5.5%, and most ships today are sailing at two knots above their slower speeds in 2020. The information from Clarksons Research on congestion is that the 7-day moving average for 2021 is 6.3% above the 7-day moving average of ships in port between 2016 to 2019 as of 21<sup>st</sup> October, which is a new record. Please keep in mind that all congestion data is based on the number of ships in port. They could be in port for various reasons i.e., loading/discharging, repairing/drydocking, or waiting for load/discharge berth, etcetera. There is no way of distinguishing one reason from another, from the available data, to discern if a ship is part of congestion or part of some other reason for being in port. The broad classification used by Clarksons Research, to use the 7-day moving average of ships in port for 2021 compared to the same 7-day moving average over 2016 to 2019, is a good measure. And according to that measure we have a 6.3% increase in ships in port this year compared to the average number of ships in port between the years 2016 and 2019. Besides, between 2016 and 2020, the world fleet has grown by more than 13%. So, despite all the current and potential future weather- and Covid-related disruptions reducing effective supply, there is an actual net increase in effective supply of ships due to the larger world fleet; the 2-knot increased speed in 2021 as compared to 2020; yet time charter rates hit 13-year highs at end of Q3 for every sector in dry bulk shipping! High time charter rates in SH 2021 are, therefore, a result of strong demand fundamentals and not simply 'effective ship supply reduction due to congestion' story that the headlines want you to believe.

## Our Read of Regulatory Developments

**GHG Emissions and Shipping:** The Economist stated in their issue dated 29th September 2021 that 'according to the UN's Food and Agriculture Organization, raising animals for meat, eggs and milk is one of the most resource-intensive processes in agriculture, accounting for 14.5% of global greenhouse-gas (GHG) emissions.' And the Economist of 5th October asks a very valid question, if 'beef emits 31 times more CO<sub>2</sub> per calorie of food than tofu does, and coal emits 24 times more CO<sub>2</sub> per unit of energy output than hydropower, then why are we phasing out coal but not beef?' (An



excellent [\*short video to watch from The Economist\*](#).) We have been asking such hard questions for quite a while but is anyone listening?

Look at the track record of the EU, and every other government on planet earth. The EU have included shipping in their emission trading scheme (ETS) to pressurize shipping companies to reduce their carbon footprint. This, for an industry that transports more than 90% of all cargoes that move around the world and only contributes 2.4% of GHG emissions. Whilst we have no issues with, and support, such initiatives we are horrified that the EU does not have any such ETS scheme foisted on their livestock industry. The reason for this strange anomaly is that the farming lobby would throw out any politician from power that even dreamt up such a crazy idea. Once again, politics trumps sensible solutions and economics trumps politics (shipping versus Livestock in terms of utility and lower GHG versus a very high GHG and a free get out of jail card; banning coal power producers though the excess GHG they produce as compared with hydropower is lower than the GHG from producing beef compared to tofu).

Retro fitting of fuel oil burning ships to become ZEVs is well-nigh impossible on a practical basis as the costs would be prohibitive along with the time required to get that done. Existing regulations are described in the next two paragraphs. What does the future regulatory landscape possibly contain in terms of carbon taxes, these will be determined at the current IMO meeting scheduled for November 2021 soon after COP26. At COP26 if the ROW starts to put pressure on Shipping and the IMO, it will strengthen the hands of IMO to go for far reaching climate goals at their November meeting. That will firstly bring us to net zero by 2050, not to 50% of CO2 emissions as compared to 2008 by 2050, which is the current regulatory target from IMO. It will also allow the IMO to put a high tax burden on every ton of CO2 emitted by existing fuel oil burning ships, such that the cost of fuel oil + taxes on emitted CO2 would make the operational cost of fuel oil burning ships equal to the cost of ZEV ships burning Ammonia.

## Energy Efficiency Existing Ship Index or EEXI

- What is EEXI? **It is a design efficiency index** and requires a one-time adjustment for non-compliant existing vessels. It describes the CO2 emissions per cargo ton-mile, by determining the standardized CO2 emissions related to installed engine power, transport capacity and ship speed.
- When does EEXI enter into force? EEXI enters into force on **1st January 2023**.
- How many ships in the worlds fleet would be affected by EEXI? Total numbers are unclear, however, articles in the shipping press indicate this could vary **between 70% and 90%** of all dry bulk ships.
- How will it impact PSL fleet? Between **40 to 60% of our fleet** would be outside the EEXI requirements. To comply Engine Power Limitation will **vary from 25% to 40%** on each such ship and speed reduction would vary **between 0.5 to 1.5 knots** on each ship.
- How much will it cost PSL? Total estimated costs for the PSL fleet would be **under USD 1.0 million**. (Ships that meet EEXI requirements would cost USD 6,000/ship. Ships that do not meet EEXI requirements would cost USD 37,500/ship).

- What are the implications for the effective supply of ships? Every 1.0K speed reduction equates to **5.5% reduction in effective supply** assuming average sailing speeds before EEXI as 11K, post EEXI speed as 10K, and ships sail for 200 days each year.

## Carbon Intensity Indicator or CII

- What is CII? It is an **operational efficiency index**, which aims to ensure continuous improvement in a vessel's emissions. The CII framework regulates the operational carbon intensity of a vessel (i.e., the carbon emissions per unit of 'transport work' or the operating mileage each year). CII is expressed in **grams of CO2 per deadweight-nautical mile**. The vessel is given an annual rating ranging from A to E, with ratings becoming increasingly stringent towards 2030.
- When does CII enter into force? The CII requirements will take effect from **1st January 2023**.
- What is the approach? The CII will **annually reduce a vessels carbon intensity**. CII is a phased approach, with an annual successive carbon intensity reduction rate of 2% compared to the 2019 reference line from 2023 through to 2026.
- How many ships in the worlds fleet would be affected by CII? Total numbers are unclear, however, approximately **30,000 ships of 5,000 gross tonnage (about 20,000 DWT)** and above are subject to the requirements and will have to determine their required annual operational CII.
- How will PSL control the CII of its fleet? The CII is based directly on the fuel consumption, which is influenced by how a specific vessel is operated in combination with its technical efficiency and type of fuel. PSL will control the CII by **optimizing operations** and ensuring our **vessels are in a good condition**.

## Our read of the Novel Coronavirus or Covid-19

With Covid-19 able to access the tightest border controls/protocols put up by China, Australia, and New Zealand, the only three countries that were aiming for a Covid-zero response, we find disruption, delays, congestion that are part of the normal landscape. Australia and New Zealand have given up on zero-covid and are learning to live with the pandemic, while China persists with a Covid-zero policy. If Covid-19 is here to stay, and we cannot see anything that indicates it will be gone anytime soon, then the delays, disruptions, congestion, port closures, quarantine, and other related features, that we currently see in 2021, will be there in the future too.

## Others' reading of the market

US coal exports to China amounted to roughly 5.0 MMT in H1 2021, which is up 4.2 MMT from 0.8 MMT in H1 2019 and 0.8 MMT in H1 2020. China has thus increased market share of US coal export from c1.5% to 13% currently. US coal exports have been a clear beneficiary of recent political tensions between China and Australia, with China looking to source coal from other sources than the country "down under". The biggest importers of US coal have YTD been India (8.8 MMT), China (5.0), Netherlands (3.3), Japan (3.3), Brazil (3.2) and South Korea (2.5), which combined have accounted for 67% of total volumes. Isolating the Asian countries, we find that US coal exports have

grown by 19% in H1 2021 relative to H1 2019 and is only 4% below H1 2018. Increased export to Asia entails longer ton-mile voyages - a positive data point for dry bulk utilization. (DNB Markets – 17 Aug 21)

Agri bulk shipments are forecast at 664.6 MMT for 2021, an increase of 8.2% YoY and be the highest year on record. In 2025, we estimate a total of 765 MMT in grain shipments for a CAGR of 4.4% from 2020. This can be attributed to weather disruptions impacting supply issues, more than changes in demand, and will not influence future harvests. (Braemar ACM – 26 Aug 21)

We remain optimistic about demand, but the most important reason for our continued positive view on the dry bulk market is supply. The orderbook of ~6% is historically low, and fleet growth (which is “always” what kills an upcycle) will be muted over the coming years. We lift our rate assumptions, earnings estimates and target prices, and we reiterate our Buy recommendations. (Arctic Securities – 16 Sep 21)

Strong economic recovery from Covid-19 (GDP projection: up 6.0% in 2021 vs -3.2% in 2020) continues to be supported by \$16tn of global stimulus, the roll-out of vaccines and “pent-up” demand. Against this backdrop, overall seaborne trade has returned to pre-pandemic levels. However, the recovery profile varies; container, gas and dry bulk trade have seen the strongest trends. While risks remain from Covid-19 outbreaks; “cooling” trends in China’s industrial sector; increased taxation; the trade outlook seems broadly healthy. Disruption to global logistics and supply chains is widespread. Congestion at ports is now estimated to be absorbing an additional 3% of bulker fleet capacity. In the short term at least, continued “bottlenecks” are likely. The short-term outlook remains firm: further ahead changes in consumer spending, any easing to congestion and the newbuild backlog (heavier from 2023) may come into play. Bulker earnings have increased to their highest levels for over a decade and our supply/demand projections are positive, even if some congestion may ease. Supply growth remains below trend: the orderbook is limited and shipyard capacity reduced (111 active “large” yards vs 320 at peak). Newbuild ordering has increased with record containership ordering (3.4m TEU, taking the orderbook to 22% of the fleet). Sharply rising steel prices and reduced berth availability have led to higher newbuild prices (up 20% so far in 2021, more in containers, to the highest levels since 2009). Deliveries are expected to decline in 2022 before recovering in 2023. Recycling has been limited: scrap prices have surged (now at ~\$600/LDT, up from \$400/LDT at start year). The S&P market has also seen record activity. Bulker S&P prices are up an impressive ~70% since start year. The IMO’s EEXI and CII measures come into force in 2023 (potential impacts: speed, ESD retrofitting, recycling?) while the inclusion of shipping in the EU’s Emissions Trading Scheme and the bloc’s ‘FuelEU maritime’ initiative are also set to impact. Debate continues over the policies and technology to drive the long-term Fueling Transition. With the recovery from Covid-19 continuing and disruption likely to take time to unwind, market sentiment remains positive. While risks remain and progress may be uneven, the improving economy, limited orderbook and the Green Transition seem supportive tailwinds for the moment. (Clarksons – 24 Sep 21)

The bulker sector has taken major strides forward this year, with Clarksons Weighted Average Bulker Earnings averaging \$25,510/day in the YTD, up 200% y-o-y and 135% above the 10yr average. Earnings have seen particularly robust gains recently, with our index topping \$40,000/day on 1st October. While the multi-year ‘super-cycle’ of the 2000s was clearly unprecedented (earnings averaged over \$30,000/day from 2004-08), it is interesting to note that since 1990 bulker earnings have only exceeded the current level for 14 months in 2007-08. Major improvements have been driven by a range of factors, led by a firm dry bulk trade rebound; our monthly volume indicator was up 4% y-o-y across Jan-Aug, with changes to trade patterns adding a ton-mile ‘boost’. Port congestion (we estimate an additional 3-4% of bulker capacity is currently being soaked up) has added fuel to the

fire, while container sector disruption has also lent support, with cargoes being 'unboxed' and some bulker owners even being approached to move containers.

This all comes against a 'manageable' supply backdrop, with fleet growth of c.3% y-o-y, and the orderbook at just 6% of capacity, a 30-year low. The smaller segments have arguably seen even more impressive trends so far this year. Compared to 10-year average levels, Panamax spot (+138%), Supra trip (+141%) and Handy size trip (+154%) earnings have all outperformed the Capes (+115%) in the year to date, and all stood above \$35,000/day by 1st October for the first time since 2008. Compared to pre-Covid levels, grain trade (+12% Jan-Aug) has been amongst the best performing commodities globally this year, while minor bulk trade has rebounded firmly, and Chinese coal demand has also lent support. Short-term sentiment and fundamentals remain positive, and the bulker sector can, for now, enjoy its time in the limelight. (Clarksons – 1 Oct 21)

The rally in the dry bulk market seen during Q3 saw freight rates hit a decade high due to congestion caused by stringent Covid-19 protocols and weather-induced supply tightness, while demand stayed robust. As the market moves into Q4, which is typically the strongest period of the year, participants expect the fundamentals to remain sound and freight rates to stay elevated and volatile as well, as vessel itineraries could be disrupted by fluid Covid-19 protocols that are enforced at various ports. The trend of employing dry bulk ships to move containers, and cargoes that were containerized over past decades, is expected to carry on into 2022. (Platts – 5 Oct 21)

The IMF in its semi-annual update lowered its global growth forecast to +5.9%, a moderate reduction from the previous +6.0%. The agency said the backdrop was more bearish than the numbers implied with the headline figure masking large divergences between countries. Differences in vaccine levels between developed and developing countries remain an issue. Commodity inflation amid supply side disruptions also is playing a part. Importantly, virtually all the markdowns came in OECD countries, while a slight 0.1%-pts markdown in energy intensive emerging economies was mostly cancelled out by a mark-up in this year's growth projection. (Arctic Securities – 13 Oct 21)

In Jan-Sep 2021, the Capesize time charter index averaged 30,122 USD/day (+156.3% y o y), the Panamax (82 k) 25,986 USD/day (+181.7% YOY), the Supramax 25,441 USD/day (+246.9% YOY), the Handysize (38 k) 23,752 USD/day (+240.9% YOY). Deliveries of bulkers in 2021 are expected to decline to 34.3 MDWT, from 47.5 MDWT in 2020. Demolition activity in 2021 is expected to decline to 8.64 MDWT, from 12.9 MDWT in 2020. Net fleet growth for all bulkers over 20,000 DWT is expected to slow down to around 3% YOY in 2021 and then continue at about 1% in 2022 based on the orderbook, expected slippage, and demolition. The fleet expanded by a net 4% YOY in 2020. In the first 9 months of 2021, global iron ore loadings increased by 1.5% YOY to 1,162.1 MMT. Iron ore loadings from Australia increased by 0.2% YOY, and from Brazil increased by 8.5% YOY. In the first 9 months of 2021, global coal loadings increased by 4.7% y o y to 884.9 MMT. Coal loadings from Australia increased by 1.3 YOY, from Indonesia by 4.4% YOY, from Russia 10.8% YOY, from the USA 18.3% YOY. (Banchemo Costa – 15 Oct 21)

The CEO of Alvean Sugar SL, the world's largest sugar trader, recently stated that the share of refined sugar trade done using containers had fallen from its pre-pandemic level of 80% to around 60%. According to Clarksons, 2019's white sugar trade in dry bulk amounted to 26 MMT and would suggest containerized volumes of 108 MMT. The CEO's numbers would imply a doubling of white sugar volumes on dry bulk vessels and contribute to the current tight dry bulk markets. The phenomenon is not isolated to sugar and has been evident for several commodities which have favored cheap container boxes over shipments in bulkers in recent years. For example, a rice exporter in India is looking to use a dry bulk vessel for a shipment of rice equivalent to 10 full containers. The switch from container boxes to bulk vessels has been apparent for some time, with certain stakeholders citing numbers up to 10% of volumes

for Supramax bulkers. In our view, this could explain some of the consistent strength seen thus far in 2021 for the smaller vessel segments. (DNB Markets – 25 Oct 21)

## What others' say about Supply Side Developments

The Handysize fleet profile over the past ten years has been unlike any of the other dry sectors for though there has been a strong inflow of tonnage (60 MDWT) there has equally been a high level of scrapping (51 MDWT) such that overall fleet growth in Handysize over the past 10-year period is a mere 0.9% and with shrinking deliveries over the past 5 years this has fallen to just 0.7%. Deliveries in the Handysize segment numbered just 76 in 2019 and 68 last year compared to 121 and 138 vessels in the same years in the Supra-Ultra sector. So far this year there have been 45 deliveries in Handysize with most new buildings concentrated in the larger 37-45,000 DWT with 26 deletions though with deletions slowing to a trickle due to the exceptionally firm market net tonnage growth is expected to rise for the balance of the year possibly up to around 1.4 MDWT which would equate to about 1.2% annual net growth. However, given that the Handysize sector has benefited most from the switch from containers into dry from several bagged and breakbulk trades and that minor bulk demand growth is estimated to be around 6% in 2021 this potential slight rise in net growth is unlikely to impact on the present positive Handysize fundamentals. Indeed, BHSI is currently standing at a record \$32,691, slightly above the Baltic Panamax Index! (Howe Robinson Research – 13 Aug 21)

In 2011 China's shipyards numbered 187 producing a record 688 dry bulk vessels; today there are 52 yards that delivered 233 vessels in 2020. We estimate the forward orderbook for the remaining months of 2021 plus 2022-2023 and a handful of orders for 2024 to be 365 vessels. In Japan numbers of yards in the same timeframe have dropped from 57 to 31 and numbers have dropped from 281 in 2011 (peaking at 312 in 2012) to 200 last year. We can see just over 200 new building orders in total from now until 2025 with most Japanese yards unable to quote for a dry bulk slot until SH 2024. In the super cycle South Korea delivered nearly 600 bulkers between 2011-14 this is now unlikely to happen as the handful of ship-building groups (down from 17 yards 10 years ago) are concentrating on other designs; at present there are only 7 dry cargo vessels, mostly Guiba-maxes, on order. (Howe Robinson Research – 10 Sep 21)

The key theme on the supply side continues to be an extremely limited orderbook for the next couple of years. Underpinning this view are several factors. The first is that capacity for new bulk carrier construction has been constrained by the recent surge in bookings of containerships, gas carriers and car carriers. So far this year 522 containership orders have been placed, 317% higher than over 2020. These have filled already-limited numbers of slots at yards, which have seen relatively little investment in recent years, and the 2023 orderbook is now almost locked in. Fresh orders placed over the next few months will likely only push up the delivery schedule from 2024 onwards. We also do not expect a 2000s-style surge in Chinese shipbuilding capacity, which will help to cap supply growth. On top of this, serious uncertainty remains over what kind of ship to order regarding carbon efficiency regulations coming into force from 2023. We expect that as owners focus on fleet renewal via the secondhand market, and the muted delivery schedule supports earnings, scrapping activity is likely to remain limited. We think scrapping next year will stay at similar levels to the SH of this year, before edging upwards over our forecast range. Bringing all these together, we forecast the entire dry bulk fleet to grow at a CAGR of 2.24% between 2021 and 2025. This compares to a CAGR of 3.42% since 2015, and 5.49% over the last decade. 2022 marks the low point for capacity increases, with the fleet growing by just 2.02% YoY, the lowest rate since 1999. Across the different sectors however, supply growth is not spread evenly. On top, we have Panamax with a CAGR of 3.15% over the next four years, while the Cape and Supramax segments are expected to grow by 2.36% and 2.49% respectively. We expect Handy fleet growth to remain sluggish, owing to very low

ordering activity over the past few years. We project supply of these vessels to grow at a CAGR of just 1.14% over this time frame. (Braemar ACM – 14 Oct 21)

Our Capesize/Panamax port congestion index now shows 209 MDWT (7 day moving average) is at port, 34.3% of the fleet, +4.4% compared to an average of 29.9% over 2016-19, helping bulker earnings to the highest levels for over a decade. (Clarksons – 15 Oct 21)

With demolition virtually non-existent net fleet growth in 2021 is expected to be around 27-28 MDWT accounting for around a 3% net increase in the dry cargo fleet though the percentage increase in the fleet is highest in the Cape and Panamax sectors at 3.5% compared to 2.6% in Supramax and just over 1% in Handysize. The 2022 orderbook looks evenly spread throughout the year so we are unlikely to see usual strong inflow of tonnage in January, which is perhaps a favorable pointer for Q1 2022, usually the weakest quarter in the year. (Howe Robinson Research – 15 Oct 21)

## What others' say about Regulatory Developments

The UN climate panel has released its [most comprehensive assessment of climate change yet](#). The report's main conclusions: (1) Humans are to blame – full stop. (2) Temperatures will keep rising. (3) Weather is getting extreme. (4) Arctic summers could soon be free of ice. (5) Seas will rise no matter what. (6) We are running out of time. (Reuters – 9 Aug 21)

In the last decade, South Korea's state-linked institutions have funneled more than \$127 billion to finance fossil fuel projects worldwide, says a new report by NGO Solutions for our Climate. (Fortune – 31 Aug 21)

The global production of food is responsible for a third of all planet-heating gases emitted by human activity, with the use of animals for meat causing twice the pollution of producing plant-based foods, a major new study has found. (The Guardian – 13 Sep 21)

A drone controlled by the European Maritime Safety Agency (EMSA) in an operation for the Spanish authorities has detected 27 vessels which were in possible breach of the limits on the sulphur content of their fuel. While this does not confirm non-compliance directly, it does help port authorities target ships for inspection and proceed with lab testing necessary for eventual sanctions. (TradeWinds – 21 Sep 21)

According to the UN's Food and Agriculture Organization, raising animals for meat, eggs and milk is one of the most resource-intensive processes in agriculture, accounting for 14.5% of global greenhouse-gas emissions. (The Economist – 29 Sep 21)

We look at the first big energy scare of the green era. Since May, the price of a basket of oil, coal and gas has soared by 95%. American petrol prices have hit \$3 a gallon. Blackouts have engulfed China and India. Britain has turned its coal-fired power stations back on. And Putin reminded Europe that its supply of fuel relies on Russian goodwill. The panic is testament to how much modern life depends on abundant energy: without it, bills become unaffordable, homes freeze and businesses stall. However, the panic has also exposed deeper problems as the world shifts to a cleaner energy system, including inadequate investment in renewables and some transition fossil fuels, rising geopolitical risks and flimsy safety buffers in power markets. The world may yet escape a severe energy recession: the glitches may be resolved, and Russia and OPEC may grudgingly boost oil and gas production. (The Economist – 29 Sep 21)

Our data analysis shows that beef emits 31 times more CO<sub>2</sub> per calorie of food than tofu does. By comparison, coal emits 24 times more CO<sub>2</sub> per unit of energy output than hydropower—so why are we phasing out coal but not beef? (The Economist – 5 Oct 21)

Each ton of aluminum takes about 14 megawatt hours of power to produce, enough to run an average UK home for more than three years. If the 65 MMT-a-year aluminum industry was a country, it would rank as the fifth-largest power consumer in the world. (Bloomberg – 11 Oct 21)

The LME metals index and the UN global food-price index are both back up to the levels of 2008. Oil and gas prices have been rising for months; coffee and cotton are nearing decadal peaks. Central bankers are jittery about inflation taking off. (The Economist – 14 Oct 21)

For every tonne of cement produced, around a tonne of carbon dioxide is released. The 5 BMT of cement produced each year account for around 8% of the world's anthropogenic carbon-dioxide emissions. If the cement industry were a country, it would be the third-largest emitter in the world, after China and America. (The Economist – 3 Nov 21)

## Others' read of the Novel Coronavirus or Covid-19

A third dose of Pfizer's Covid-19 vaccine has significantly improved protection from infection and serious illness among people aged 60 and older in Israel compared with those who received two shots, findings published by the Health Ministry showed. (Reuters – 23 Aug 21)

A new study suggests pregnant women with Covid-19 are 15 times more likely to die, and 22 times more likely to have a premature delivery, than those who are not infected. (Fortune – 23 Aug 21)

Officially, covid-19 has killed around 4.5m people. But according to our own model, that is a dramatic undercount: we estimate that the actual death toll is 15.2m people and may be as high as 18.1m. (The Economist – 4 Sep 21)

A new US government study found unvaccinated people are 11 times more likely to die of Covid-19 as the delta variant continues to kill thousands of them daily while also triggering so-called breakthrough cases among the vaccinated. (Bloomberg – 10 Sep 21)

Israel is preparing for a possible fourth vaccine dose in case a fresh round of boosters is required. (Bloomberg - 12 Sep 21)

In a telling reminder of the devastation wrought by the pandemic, US coronavirus deaths rose Monday to more than 675,000, higher than the death toll of the 1918 influenza pandemic -- and a number, experts said should never have gotten so high. (Boston Globe – 20 Sep 21)

The Pfizer-BioNTech vaccine was safe and produced strong antibody responses in children ages 5 to 11 in a large-scale trial, according to the companies' findings that could pave the way to begin vaccinating grade-school kids. (Bloomberg – 20 Sep 21)

A booster dose of Johnson & Johnson's one-shot vaccine provided 100% protection against severe disease, according to the company. (Bloomberg - 21 Sep 21)

Data from late-stage trials of Sichuan Clover Pharmaceuticals' Covid vaccine suggests that it prevents 79% of Delta cases, making it one of the first Chinese-developed vaccines to release efficacy data against the more transmissible Covid variant. (Fortune - 23 Sep 21)

A third dose protects people, the economy and social wellbeing, and crucially, retains public trust in vaccines, says Israel's PM Naftali Bennett. (The Economist – 25 Sep 21)

Merck & Co's experimental oral drug for Covid-19, molnupiravir, reduced by around 50% the chance of hospitalization or death for patients at risk of severe disease, according to interim clinical trial results. (Reuters – 1 Oct 21)

New Zealand abandoned its strategy of eliminating coronavirus amid a persistent Delta outbreak and will instead look to live with the virus and control its spread as its vaccination rate rises. (Reuters – 4 Oct 21)

The effectiveness of the Pfizer/BioNTech vaccine in preventing infection dropped to 47% from 88% six months after the second dose, according to data published that US health agencies considered when deciding on the need for booster shots. (Reuters – 5 Oct 21)

Zhong Nanshan—one of China's leading epidemiologists—gave some of the first indications of when China might move away from its aggressive Covid-zero strategy. Zhong noted that the policy is unsustainable in the long-run and suggested that an 80-85% full vaccination rate might be a safe threshold to consider a change in strategy. China is increasingly alone in its pursuit of Covid zero, with Singapore, Australia and New Zealand all announcing plans to begin to “live with the virus.” (Fortune – 5 Oct 21)

Sweden and Denmark halted Covid-19 vaccinations with Moderna's shot for younger people citing potential side effects. (Bloomberg - 6 Oct 21)

Pfizer and BioNTech applied for approval of their Covid-19 vaccine for children aged 5 to 11. With a regulatory meeting already set for October 26, it's possible kids could be lined up for shots by November 1. (Bloomberg – 7 Oct 21)

AstraZeneca says its experimental antibody drug cocktail for treating Covid-19 has been successful in reducing severe disease or death with continued protection of more than 6 months. (Fortune – 11 Oct 21)

A new study shows the toll Covid-19 has taken on people's mental health. The authors estimate that cases of depression rose by 53m around the world because of the pandemic, 28% above pre-pandemic levels. Cases of anxiety increased by 76m, a 26% rise. The study also found that women were more affected than men. (The Economist – 12 Oct 21)

On Monday, the WHO recommended that people over the age of 60 get a third dose of vaccines from Chinese makers Sinovac and Sinopharm. In total, the WHO's recommendation for booster shots advises hundreds of millions of people to immediately get another jab. The WHO also advised that all moderately or severely immunocompromised people fully vaccinated with any WHO-approved shot should also get a booster jab. (Fortune – 12 Oct 21)

This week, vaccine inequity took a turn for the worse. Moderna said that it would not share the recipe for its Covid-19 shot despite pressure to do so to increase the global vaccine supply. The company, which has sold doses almost exclusively to wealthy countries, also said it would open a new vaccine plant in Africa to boost the supply itself, but it didn't specify when (or where on the continent) that would happen.



The debate over waiving vaccine patents has not budged for several months, unlike the vaccination gap between rich and poor nations. As of October 6, nearly 61% of people in high-income countries have received at least one dose. In low-income countries, the proportion is 3.72%. The gap is getting wider with time, which is why the stalemate over patent waivers is so problematic: Every day that passes without securing shots for the world's unvaccinated is another day the coronavirus can mutate and spread around the world. (Fortune – 14 Oct 21)

Children aged 5 to 11 will soon be able to get a Covid-19 shot at their pediatrician's office, local pharmacy and potentially even their school, the White House said Wednesday as it detailed plans for the expected authorization of the Pfizer shot for younger children in a matter of weeks. (Boston Globe - 20 Oct 21)

The US FDA authorized booster doses of the Covid-19 vaccines from Moderna and J&J and said Americans can choose a different shot from their original inoculation as a booster. (Reuters – 21 Oct 21)

Pfizer have released extremely encouraging data about their booster, saying it is 95.6% effective against Covid-19. In other words, it restores the level of protection that people generally have after their second dose, before the effectiveness starts to wane, it hits 84% after four months. (Fortune – 22 Oct 21)

The Pfizer /BioNTech Covid-19 vaccine showed 90.7% efficacy against the coronavirus in a clinical trial of children 5 to 11 years old, the U.S. drugmaker said. (Reuters – 22 Oct 21)

Moderna says its Covid shot showed strong results in children. (Bloomberg – 25 Oct 21)

A generic and low-cost antidepressant may reduce the risk that Covid-19 will land an infected patient in the hospital, making it a potentially potent weapon against the virus. (Bloomberg - 28 Oct 21)

After a drawn-out debate on Tuesday, an US FDA advisory panel voted to recommend a kid-sized dose of the Pfizer vaccine for children aged 5 to 11. (Fortune - 28 Oct 21)

People with covid-19 jabs have been less likely to die of other causes. A new study shows the discrepancy, but there is not yet an explanation. (The Economist – 30 Oct 21)

Pfizer said Friday that its experimental antiviral pill for Covid-19 cut rates of hospitalization and death by nearly 90% as the drugmaker joins the race to bring the first easy-to-use medication against the coronavirus to the US market. Pfizer said it will ask the FDA and international regulators to authorize its pill as soon as possible, after independent experts recommended halting the company's study based on the strength of its results. (Boston Globe – 5 Nov 21)

## Key Demand Developments

### China

The Chinese government pledged to cap steel pollution by limiting output to last year's figure of 1.1 BMT. However, a surge in production in H1 means that the lower target volume for the year can only be achieved if manufacturers reduce output by 10% for the rest of 2021. The problem arises with

China's stimulus-led building and manufacturing boom that has propelled demand causing near record high prices for steel. As such any forced supply cuts could further elevate prices to multi-year highs. Global demand for steel is anticipated to remain robust due to easing of pandemic restrictions. In India, production stands to rise as the country slowly eases in daily cases. (Maersk Brokers – 20 Aug 21)

According to Chinese customs authorities August figures, Chinese imports of coal and iron ore amounted to 28.0 MMT and 97.4 MMT, which is down 7% MOM and up 10% MOM, respectively. For coal, August imports were up 35% YOY but down 15% compared to 2019 and has YTD declined 10%. Seemingly, Chinese coal imports are thus far following the H2 pattern of 2019-2020 and is YTD 1% above its four-year historical average. For iron ore, August imports were down 3% YOY but up 3% compared to 2019 and has YTD declined 2%. Disregarding current regulatory pressure on Chinese steelmakers, China's iron ore imports usually sees a stronger H2, with recent figures pointing to a similar trend for 2021. YTD, Chinese iron ore imports are up 5% compared to its four-year historical average. (DNB Markets – 7 Sep 21)

China's projected 2021-22 soybean imports were unchanged from last month at 102 MMT, up 3.4% on the year. Crush margins in China are around four-month highs though still not great, but the US cancellation and purchase of very pricy Brazilian beans likely signals a need. (Reuters – 16 Sep 21)

China's coal-fired power plants are facing procurement challenges for coal due to tight domestic supply, high prices, disruptions in shipping and strong electricity demand, the China Electricity Council (CEC) said in a report dated 27 Sept '21. The CEC has thus advised plants to build inventory to ease the situation as electricity rationing by several Chinese provinces has taken place the recent weeks whilst seeing power outages in some cities. Chinese electricity consumption rose 13.8% over Jan-Aug, versus an 11.3% industrial power generation increase during the same period. Translated into the dry bulk market, the Supramax FFA for Oct '21 currently stands at USD ~38.8k/d. (Arctic Securities – 29 Sep 21)

Global supply chains are being threatened by China's power crunch. Provincial governments are forcing temporary power rationing to meet emission-reduction targets, though it should be noted that Chinese power producers are suffering from coal/gas shortages that make electricity generation unprofitable. (Fortune – 29 Sep 21)

The Chinese order to secure supplies at all costs has highly positive implications for the dry bulk market as well. With power outages no longer being tolerated, Chinese coal imports are set to increase going forward (at least highly likely). If demand increases by 1%, imports should increase by as much as ~13%, assuming that all incremental demand is served by imports. Similarly, a 2% increase in demand, would imply ~26% increase in imports. To put that further into perspective, total seaborne coal trade is about 1.3bn tons. As such, a 1% and 2% increase in Chinese demand (once again assuming that incremental demand is served by imports), would imply a ~2-5% increase in seaborne trade (all else equal). (Arctic Securities – 1 Oct 21)

China's power consumption in the first eight months of this year expanded by 11.3%, the highest increase since 2011. Domestic coal output expanded by only 4.4% and hydro power contracted by 1%. China is finding it difficult to fill the 70 MMT void left in the wake of its unofficial import ban on Australian coal. Whilst covid protocols may require foreign vessels to quarantine for 7-21 days before discharge, contributing to 5% of the Dry Bulk fleet congested at Chinese ports, China has introduced full-scale closures at several border crossings from Mongolia. As a result, coal imports from China's overland neighbor and largest met coal supplier declined by 20% year on year (-3 MMT). Imports from China's largest supplier, Indonesia, expanded by only 20 MMT as labour shortages, heavy rains, and other supply chain disruptions limited its

ability to increase export capacity. Russia shipped over 37 MMT of coal to China from both nearby Far Eastern ports as well as far more distant Baltic ports, together with high quality anthracite from Taman in the Black Sea increasing total trade by over 14 MMT year on year. China's imports from South Africa have burgeoned to 4.4 MMT after virtually no shipments in 2020. Imports from the US expanded by 672% (+5 MMT) to over 5.7 MMT. In total, seaborne imports from these "Other" providers increased by 16.6 MMT, the largest rise on record. China's ban on Australian coal imports has exerted a significant shift within the Dry Bulk market. Without Australian trade, the Panamax sector increased its share of coal cargoes from 33% in 2020 to 43% this year, at the expense of the Capes representing the only Dry Bulk sector to carry more coal into China than last year. However, China's total seaborne coal imports declined by over 20 MMT in the first eight months. Pressure to supply more domestic coal has seen China's domestic thermal coal price (6k c.v.) rising to a record \$250/ton. By comparison, the price was barely north of \$90/ton this time last year. International met coal CFR prices have soared to \$600/ton on Chinese demand. Total met coal imports fell 22 MMT to 31 MMT, accounting for the majority of China's coal import decline. China's headline PMI for September registered a contraction for the first time since the pandemic struck early last year amid fears that the lack of energy may limit industrial output going forward. (Howe Robinson Research – 1 Oct 21)

Extreme weather during China's national holidays (1-7 Oct) has caused mass flooding across Shanxi province, one of the country's largest coal producing regions. As a result, 60 coal mines in the area reportedly suspended operations from 2nd Oct before Shanxi's provincial government announced 56 of the 60 mines had resumed operations since 12 Oct morning. Shaanxi, another coal-heavy region in China, saw their provincial government announce on 12 Oct that all mines in the Binchang mining area had to suspend operations due to a cave-in accident. (Braemar ACM – 12 Oct 21)

Severe floods in northern China pummeled mining operations, displaced over 120,000 people, and worsened the country's energy crunch. Coal futures traded on the Zhengzhou Commodity Exchange gained 11.6% to close at \$218.74 a tonne on Monday, roughly double the price at the start of 2021. (Fortune – 12 Oct 21)

PBOC's Governor Yi Gang said authorities can contain risks posed to the Chinese economy and financial system from the struggles of Evergrande. The property developer's trouble cast a little concern, but "overall, we can contain the Evergrande risk," Yi said. Beijing is loosening restrictions on home loans at its largest banks as default risks mount for developers caught up in the crisis. (Bloomberg – 17 Oct 21)

China's NDRC has issued a directive to reduce thermal coal prices under an existing price law, as the onset of winter is affecting several regions already and coal prices are at historical highs. (Argus – 20 Oct 21)

One casualty of China's energy crunch is fertilizer production, which depends on coal and natural gas. The global impact could be big. China is a key supplier of urea, sulphate and phosphate, accounting for 30% of global trade. The biggest buyers of China's fertilizers include India, Pakistan, and countries in Southeast Asia, which may now need to find alternative sources to supply their farmers. (Bloomberg – 21 Oct 21)

China has moved from the largest cement exporter in 2017 to be, from 2019, the largest importer. China is importing from Vietnam and Thailand forcing their usual customer, Bangladesh, to source cement clinker (c.10 MMT) from Pakistan, UAE, and other countries in the Middle East. This change in trading pattern has placed further demands on ships in the Indian Ocean making it the place with the highest rates in the Handy and Supra-Ultra sectors. Chinese imports have marginally reined

back this year (almost certainly due to sky high freight) but are comfortably still the largest in the world having fallen by 3 MMT YOY between Jan-Aug 2021. Whilst the vast majority is shipped in clinker form, mainly in Supras, we see growth in powdered cement being carried in smaller Handy and self-unloading specialist ships. Vietnam's pre-eminence as the main supplier remains unchallenged (14 out of 18 MMT) and is the only country to increase exports to China in 2021. (Howe Robinson Research – 22 Oct 21)

Chinese developer Modern Land became the fourth mainland property firm to miss dollar bond payment deadlines this month, following Fantasia Holdings, Sinic Holdings, and China Properties Group, highlighting the pressure that's spreading across the sector. The indebted developer failed to pay the interest and principal due on a \$250 million bond, it said in a Tuesday filing with the Singapore Stock Exchange. Embattled developer Evergrande avoided a default last week but faces another major repayment deadline this Friday. (Fortune – 26 Oct 21)

## Americas

A new study finds the *long-lasting effects of an ancient piece of pre-Colombian infrastructure*: an Inca highway in Peru. Residents living alongside the thoroughfare today still benefit from its presence. The researchers find it explains higher wages, better nutrition, and the amount of schooling in the area. They also find that women benefit more than men from the Incas' durable legacy. (The Economist – 3 Aug 21)

\$6.84 trillion cash and highly liquid assets are sitting on the books of S&P 500 companies, a new record. That is 45% higher than the average in the five years preceding the pandemic and a 2.6% increase from the previous quarter. The reason? Uncertainties over Delta are still fouling up companies' spending plans. (Wall Street Journal – 16 Aug 21)

As older drivers age out of trucking, younger ones aren't replacing them fast enough. Qualifying to be a commercial driver requires a lot: a stellar driving record and passing background checks, drug testing, and a slew of other requirements. And the long-haul life's not for everyone; turnover among newly minted drivers is high. (Boston Globe – 7 Oct 21)

Brazil's corn harvest has suffered from both drought conditions in late April during planting and unseasonable frosts in June. Yields have been significantly affected with the Brazilian Ministry of Agriculture (CONAB) reduced its estimate by 21% to just over 85 MMT. Brazil exported 34 MMT of corn in 2020 but forecasts for 2021 are now around 22 MMT. Q3 is usually the peak transportation season but this year just 9 MMT was shipped compared to 15.5 MMT in Q3 2020. September's monthly exports sank to only 2.9 MMT, the lowest figure for that month since 2011, and 3.5 MMT lower than the 6.4 MMT exported during same month last year. Such a cut in shipments would usually adversely affect the Panamax market as 80% of fronthaul shipments are carried by this sector but though corn shipments to Asia have more than halved so far this year to just 3.4 MMT (7.6 MMT to Q3 last year), plentiful grain and other mineral activity continued with a slight boost in Brazilian soybean exports that has kept the market buoyant. Trans-Atlantic corn activity (mainly carried in Handy-Supras) has much less reductions in volume. (Howe Robinson Research – 8 Oct 21)

Covid-19 is one reason why prices are rising at the fastest pace in decades across much of the world. In America prices leapt by 4.3% in the year to August, according to the Federal Reserve's preferred measure—a 30-year high. In the euro zone annual inflation hit 3.4% in September, the highest rate in over a decade. Our data journalists have been looking at historical pandemics to ask if such events normally lead to rising inflation. Their analysis, using data that go back to the 14th century, shows that pandemics typically lead to lower, not higher, inflation. (The Economist – 9 Oct 21)

In January 1985, as far back as data goes, US imported \$293 million of goods from China (and had a positive trade balance). Fast forward to today, in August of this year, US imports from China totaled nearly \$43 billion. That is up 146-fold in 36 years. Our imports from Asia across the board are up. China is the No. 1 exporting nation to the US, but Japan, South Korea, and Vietnam are also in the top 10 list. (Yahoo Finance – 9 Oct 21)

Yesterday, Vale reported Q3 iron ore production of 89.4 MMT, which is up 18% QOQ and 3% YOY. Vale expects 2021 iron ore production to reach 315-335 MMT, which would imply a Q4 production of 998kt per day to reach mid-point, slightly above Q3 production at 972kt. However, as a part of Vale's "value over volume" strategy, the company has lowered its high-silica-low-margin production by 4 MMT in Q4. Production will likely end below mid-point for 2021, but above the low-end of the guidance range (890kt per day for Q4). On a more bullish note, Vale's Q3 iron ore sales only amounted to 76% of its production, versus an average of 91% in the three preceding quarters, this is due to transiting inventories across the supply chain which should reverse in Q4. Vale guides for an end-of-year capacity of 343 MMT for 2021e, 370 MMT for 2022e, growing to 400 MMT in the "medium term", and 400-450 MMT in the "long term", which compares to its current production capacity of 335 MMT. The main change stems from Vale's Northern System, which has seen its 2022 production guidance lowered by 25 MMT from the target 400 MMT run rate. In our view, seen in relation to the recent Capesize strength, we find Vale's guided trajectory a positive. (DNB Markets – 20 Oct 21)

## Asia

India aims to invest \$1.35 trillion in infrastructure to boost economic growth and create jobs, PM Narendra Modi said, laying out national priorities on the country's 75th Independence Day. The investments will be made in India's logistics sector to help integrate the country's varied modes of transport. (Bloomberg – 15 Aug 21)

India could account for as much as 45% of global rice exports in 2021 as expanded port-handling capacity allows the world's second largest rice grower after China to ship record volumes to buyers across Africa and Asia. The world's top exporter could ship as much as 22 MMT of rice this year, or more than the combined exports of the next three largest exporters Thailand, Vietnam, and Pakistan, said Nitin Gupta, vice president of Olam India's rice business. (Reuters – 16 Sep 21)

Indonesia's coal exports are likely to jump by 53 MMT this year, Noble analyst Rodrigo Echeverri told a virtual conference on Tuesday. Russian coal exports are seen up 9 MMT this year, while South African coal shipments are forecast to fall 6 to 7 MMT, Echeverri said. The coal market is seen remaining tight throughout the rest of 2021, he added. (Reuters – 21 Sep 21)

India has found itself critically low on inventories of coal amid a surge in power demand from industries and slow imports due to record global prices. Over half of India's 135 coal-fired power plants have fuel stocks of less than three days. Competing with India for coal is China, the world's largest consumer of the commodity, and under energy pressure as the nation deals with power outages due to rising energy demand and low fuel stocks. Coal accounts for over 70% of India's electricity output. Market experts anticipate Australian and Indonesian thermal coal prices to increase over the remainder of the fiscal year. Indonesian suppliers also face heavy rains that have hampered production causing output to fall 10%-40% in the past month. (Maersk Broker – 1 Oct 21)

South Korea is the fourth largest importer of iron ore in the world, after China, Japan, and the European Union. In the first 9 months of 2021, Korea imported 56.3 MMT of iron ore, which was up +11.3% y-o-y from the same period in 2020, and up by +1.2% from the same period of 2019. Australia increased volumes by +15.7% y-o-y to 43.5 MMT in Jan-Sep 2021, from 37.6 MMT in the same period of 2020.

The second largest source for Korea's iron ore imports is Brazil, accounting for a 7.5% share. However, shipments from Brazil to Korea declined by -19.2% y-o-y to 4.2 MMT in the first 9 months of 2021, from 5.2 MMT in the same period of 2020. (Howe Robinson Research – 8 Oct 21)

Indian farmers are expected to harvest a record Rice crop of 107 MMT, up from 104 MMT. India accounts for 45% of the global rice exports market and will likely gain market share on higher sales to buyers across Asia and Africa. Higher freight costs and a rally in global wheat prices are attracting Asian buyers at rates that could raise Indian wheat exports to eight-year highs in 2021 and are forecast to reach 4.2 MMT this year, the highest since 2013. Indian wheat remains cheaper compared with other countries. Indian Sugar exports in marketing season 2020/21 recorded an all-time high of 7.2 MMT, up 20% from the previous season. Indonesia was the main buyer at 1.8 MMT, followed by Afghanistan, UAE, and Somalia. (Maersk Broker – 8 Oct 21)

## Rest of the World

Coal ports in the Australian state of New South Wales have seen their activity disrupted by bad weather and an outbreak of Covid-19 cases. Queues outside Newcastle number over 40 vessels as ships are ordered away from anchorages due to storms, while delayed Covid testing is straining supply chains. The weather is expected to clear out soon, but difficulties stemming from the spread of the Delta variant are likely to persist for the foreseeable future. The queue is driving up demurrage costs, but these are offset by record prices for high-grade thermal coal exports. (Maersk Brokers – 27 Aug 21)

Last season's exceptional Australian wheat harvest (around 34 MMT) is continuing to provide strong monthly exports; both the 2.5 MMT shipped in December 2020 and the 17 MMT exported in the first seven months are records. Around 70% of all Australian exports have been shipped to Asian destinations. Traditionally Handysize tonnage carry the greatest proportion of Australian wheat but perhaps due to more plentiful cargo availability shipments on Supra-Ultras have skyrocketed this year up from 2.3 MMT to a massive 8.5 MMT in the first 7 months with Handysize by comparison up from 3 MMT to just 4.2 MMT. Clearly this additional cargo has been a key driver of such strong Supra-Ultra Pacific rates with Charterers perhaps using larger tonnage too for economies of scale. Though this year's harvest is unlikely to match 20/21's record, early signs are positive for another decent crop with analysts currently predicting around 30 MMT. (Howe Robinson Research – 3 Sep 21)

A military coup in Guinea raised questions over the country's booming bauxite exports. Freight futures temporarily dipped, while prices of aluminum, the commodity extracted from bauxite, hit decade highs. Since then, the major shippers in the country have stated that operations are unaffected and would continue as normal and given that the commodity accounts for about two thirds of the country's exports by value, any government has an interest in keeping the tonnes flowing. Crucially for freight though, bauxite is an extremely low-value commodity, refined into alumina at a roughly 2:1 ratio, which is in turn smelted into aluminum at a 2:1 ratio, so substituting alumina imports for bauxite more than doubles dry bulk trade volumes. Compounding this effect, shipments of bauxite voyages tend to be longer than for alumina, tying up the dry bulk fleet for longer. And lastly, China's own bauxite reserves have been declining in quality over the past few years, meaning demand increasingly must be satisfied by imports. (Braemar ACM – 9 Sep 21)

Higher prices from cascading bottlenecks put central banks in a seriously difficult position. In traditional economics, inflation is a monetary phenomenon that has a monetary solution in the form of higher interest rates. But this time around there's basically no chance that higher interest rates will solve the problem of higher prices caused by supply chain issues. (Bloomberg – 30 Sep 21)

For a decade after the financial crisis the world economy's problem was a lack of spending. Worried households paid down their debts, governments-imposed austerity and wary firms held back investment while hiring from a seemingly infinite pool of workers. Now spending has come roaring back, as governments have stimulated the economy and consumers let rip. The surge in demand is so powerful that supply is struggling to keep up and inflation is biting. The immediate cause of the problems is covid-19. Yet the shortage economy is also the product of the switch from fossil fuels to renewable energy and the fact that trade has become less about economic efficiency and more about goals such as labour standards and national security. Decarbonization and protectionism will be much longer-lived than the pandemic and—for policymakers—just as hard to cope with. (The Economist – 7 Oct 21)

Australia is still the top exporter of coal worldwide, with 30.8% of coal exports this year, ahead of Indonesia's 27.9% share. In the first 9 months of 2021, Australia exported 272.3 MMT of coal, which was up +1.3% y-o-y from the same period in 2020, although still down -6.2% from the same period of 2019. Coal exports from Australia to China declined by -96.9% y-o-y in Jan-Oct 2021, to just 2.0 MMT. Jan-Oct 2021, Australia exported 51.6 MMT of coal to India, up +74.0% y-o-y. India is now the destination for 19% of all Australian coal exports. Australia exported 47.2 MMT of coal to Korea in this period, which represents an increase of +50.6% y-o-y. Australian coal to the EU surged by +38.4% y-o-y to 11.2 MMT. The top destination is Japan, with 84.7 MMT in Jan-Oct 2021, up by +16.7% y-o-y. Japan takes 31.1% of Australia's coal, with Korea 17.3%, Taiwan 9.8%, and the EU at 4.1%. (Banchemo Costa – 22 Oct 21)